

Claims

[0026] What is claimed is:

5 *Sub 1* 1. A method for acquiring packet synchronization in a packet type communication network, comprising:

providing a data packet having a framing format including a preamble split into a plurality of subpreambles;

for individual subpreamble and for combined subpreamble options, determine the following parameter:

$$10 \quad \beta_i = \frac{1}{T_i^2} \cdot \int_{t_i}^{t_i+T_i} \left| r(t) \cdot e^{-j\hat{\phi}_i} \right|^2 dt;$$

where T_i is the preamble or subpreamble duration in each option, t_i is the preamble or subpreamble start time, and $\hat{\phi}_i$ is the estimated phase shift in each option;

determine synchronization using correlation with a priori known symbols using the subpreamble or combined subpreamble option which provides the lowest β .

15 *Add 8*